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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,796	07/22/2003	Kiyotaka Touma	108421-00076	5289

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EXAMINER	
MORILLO, JANELL COMBS	
ART UNIT	**PAPER NUMBER**
1742	

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/623,796	TOUMA ET AL.	
	Examiner	Art Unit	
	Janelle Combs-Morillo	1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 February 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4* is/are pending in the application.

4a) Of the above claim(s) *4* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mitamura et al (US 4,157,728).

Mitamura teaches an aluminum alloy (abstract) produced by continuous casting (column 1 lines 5-6) a billet (column 4 line 21) without peeling or removing a layer of as-cast surface, and which has a smooth cast surface (column 4 line 42-43, Fig. 9, Fig. 17-21). Mitamura teaches the segregation layer of comparative examples is 0.7-2.2 mm, while examples of the invention are held to a maximum of 0.3mm thick (Table 1, column 20), both of which fall within the presently claimed range.

Overlapping ranges have been held to be a prima facie case of obviousness, see MPEP § 2144.05. It would have been obvious to one of ordinary skill in the art to select any portion of the range, including the claimed range, from the broader range disclosed in the prior art, because the prior art finds that said composition in the entire disclosed range has a suitable utility.

Concerning the fact that Mitamura teaches nonpreferred embodiments within the presently claimed ranges, Patents are relevant as prior art for all they contain, and nonpreferred embodiments constitute prior art, MPEP 2123. Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. In re

Susi, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." In re Gurley, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994).

Mitamura does not mention the alloys' surface roughness is not more than Ra 35. However, where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Because Mitamura teaches an aluminum alloy processed in a substantially similar method, then substantially the same properties, such as surface roughness, is also expected to occur. Therefore it is held that Mitamura has created a prima facie case of obviousness of the presently claimed invention.

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mitamura, as applied to claim 1 above, in view of Igarashi (US 2,166,496).

Jin does not mention the added Ca to said alloy. However, Igarashi teaches that the addition of 0.01-0.2% Ca is effective in eliminating cracking, producing a fine grain structure, and improving forgeability (column 1 lines 35-42). It would have been obvious to one of ordinary skill in the art to add Ca to the aluminum alloy taught by Mitamura because Igarashi

teaches that the addition of 0.01-0.2% Ca is effective in eliminating cracking, produces a fine grain structure, and improves forgeability (column 1 lines 35-42).

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mitamura in view of "Aluminum and Aluminum Alloys" p. 88-89.

Mitamura does not mention the added Be to said alloy. However, "Aluminum and Aluminum Alloys" teaches Be is added in the range of a few parts per million (wherein 1 ppm=0.0001%) to aluminum alloys to reduce oxidation (p. 88). It would have been obvious to one of ordinary skill in the art to include Be in the range of a few ppm to the aluminum alloy taught by Mitamura, because "Aluminum and Aluminum Alloys" teaches that Be in said range reduces oxidation (p. 88).

Response to Amendment/Arguments

5. In the response filed on February 23, 2005, applicant amended claims 1-4. The examiner agrees that no new matter has been added.

6. Applicant's argument that Jin does not teach an alloy with the presently amended segregation layer thickness has been found persuasive. However, the instant claims are new rejected in view of Mitamura, as stated above.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle Combs-Morillo whose telephone number is (571) 272-1240. The examiner can normally be reached on 8:30 am- 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JCM
May 13, 2005

GEORGE WYSZOMIERSKI
PRIMARY EXAMINER
GROUP 1700